Seems like a whole lot of preamble about the response if the main punchline is about air monitoring. I think we should either skip the bits about flooding or explain what flooding has to do with air quality. Do we want to add information about flooding or minimize the info about it?

Intro:

Do people know the what these types of flooding are? Flash, urban, small, stream, and riverine? I don't think I really know what they are. I mean, I can guess, but what if we just said "considerable flooding" or "considerable flooding of specific types." The long list of adjectives just comes across as jargon which can be off putting to outsiders.

I think the NPL reference and the fuel waiver reference could be seen as insider language too. Giving a little context by explaining that superfund sites are places with significant potential for environmental contamination or that fuel waivers are granted in emergencies to help fuel supplies stay adequate would help.
Agree with giving a little context about the fuel waivers.

Air Quality

This whole section seems to be missing a lot of context. I would recommend adding language like what I suggest in yellow (though it should be fact checked). Is this factual as written?

Air quality is a priority for EPA and understanding potential health risks from chemicals and particles in the air is an important part of our work. This work includes several permanent LDEQ ambient air monitoring stations in the region as well as the ability to increase monitoring and other air quality response activities due to emergency needs.

Due to electrical outages, some of the monitoring stations lost power. While authorities work to get the systems running again, LDEQ and EPA have deployed other resources to monitor air quality.

On Sept. 2, LDEQ deployed Mobile Air Monitoring Labs (MAML), self-contained mobile laboratories capable of real-time sampling and analysis. The MAMLs are positioned in Norco and Marrero. When the MAML is deployed, data can be accessed at https://airquality.deq.louisiana.gov/data.

One resource EPA has at its disposal in emergency response is the use of the ASPECT aircraft. EPA's ASPECT planes are able to take a wide variety of samples and measurements that help us understand potential risks on the ground including chemical, air toxic, and radiologic risks. They are also equipped with infrared sensors and high resolution aerial cameras.

EPA sent its ASPECT aircraft to evaluate potential unreported or undetected releases of chemicals from facilities identified by LDEQ within the hurricane impacted areas. Measurements collected from the plane were ~~The screening-level results from ASPECT~~ were compared to established standards. ~~Texas' Air Monitoring Comparison Values (AMCVs) and California's Office of Health Hazard Assessment Acute Reference Exposure Levels (RELs)~~. No detectable concentrations of chemicals detectable by ASPECT were observed from data collected.

Air Sampling and monitoring:

Same on context. My additions in yellow and will need fact checking – is the info below factual as written?? . I honestly think you could cut a lot of the technical, but I did my best to keep it and explain it. It is still probably not for a general audience, but I am trying to get you to a normal college graduate level not the level for a science PhD which was I think the starting point.:

LDEQ requested EPA support for on the ground air monitoring as well. Locations were specified by LDEQ in order to increase knowledge about risks to local residents to the best extent using the available air monitoring equipment.

At these locations, EPA will use "summa canisters" to sample outdoor air for chemicals. The method being used is called Method TO-15. This scientific method for the collection and analysis of chemicals in the air allows EPA to look for the presence and amounts of a certain class of chemical called volatile organic compounds (VOCs) as well as for the amount of fine particles in the air (PM 2.5). VOCs and PM 2.5 are known to have negative health impacts.

In addition, EPA will be analyzing the samples for Tentatively Identified Compounds (TICs). Due to the nature of the scientific method and the potential chemicals that might be found, there will be less certainty about the exact make up or amounts of any TICs that might be found.

~~(Method TO-15) to sample ambient air for volatile organic compounds (VOCs), including Tentatively Identified Compounds (TICs), and will use air monitors for fine particle pollution, known as PM 2.5.~~ The canisters will measure VOCs and identify TICs using 24-hour composite samples. 24-hour composite sampling means that air is collected over the course of 24 hours and then analyzed as a batch with one sample per day. PM 2.5 will be measured through continuous monitoring. This is important because for PM 2.5 even very short term increases to high levels can be dangerous to health. By monitoring continuously, we will be able to see even short term (less than one day) increases in PM 2.5. The air monitoring locations are Shell Refinery in Norco, Denka Performance Elastomer in Reserve, Marathon Refinery in Garyville, LDEQ's Irish Channel air monitoring site, and Port Fourchon.

Samples will be sent to a lab for analysis, resulting in a roughly 24-hour processing time. For target pollutants that have existing risk comparison concentrations in EPA's Regional Screening Levels, the ambient concentrations are compared against concentrations developed with LDEQ and relying on a scenario developed using EPA's Regional Screening Level calculator. {{I don't know what this part in red

Are we keeping this info Madeline highlighted or changing verbiage??

More Information about Tentatively Identified Compounds

Usually EPA samples amounts of specific target pollutants based on what is expected to be found in the outdoor ~~ambient~~ air . Following a hurricane, however, it's more difficult to determine what to expect. Because of this uncertainty, EPA is also measuring for? Tentatively Identified Compounds, or TICs, to help characterize chemicals we might find even if they are not expected. ~~compounds that might otherwise remain unidentified during analysis~~.

After the summa canisters collect air, that air is analyzed to understand the components, or smaller parts, of the chemicals that are in that air. Chemists check these components against other known chemicals and piece together the puzzle to make the best estimation of what chemical was in the

sampled air. Because we are not checking each of these chemicals against a known “standard” there is more uncertainty on the exact chemical and the amounts found.

After a hurricane however, there is uncertainty about what exactly might be in the air. This is why it is important that we use methods that allow us to look both at chemicals that might be expected and those that are not. Ultimately this information will help us as we pursue our mission to protect human and environmental health because it will help us know more about air quality and potential health risks after hurricanes.

~~Air samples are analyzed against a Target Compound List to find a molecular “match.” Compounds that cannot be matched to one on the target list are further analyzed against a library of over 250,000 compounds to see if they can be tentatively identified as another specific compound or type of compound. Chemists can then compare the suspect compound to a known standard of the compound to confirm the identification.~~

~~Using this technique, EPA can measure both expected and unexpected pollutants. This can help give a fuller picture of how communities are being impacted following Hurricane Ida.~~

Aspect:

I made some suggestions above when we first introduced ASPECT. I would encourage doing more in this section too to explain the basics of what ASPECT is… can we just say plane instead of “aircraft” for example. Make it simpler if you can and if you can’t give context.

On the imagery:

The visuals are fun and interesting and have some sizzle as Eric likes to say, but… what am I actually looking at? I would just worry that if I lived near one of these facilities and I see the smoke or even just the size of the facilities etc that I would be alarmed when I think we are saying the ASPECT plane essentially didn’t find any problems. Maybe there is a way to make it clear that these are pictures of no problems throughout so that even if you click ahead and miss the preamble you know that while you are looking at a chemical facility as far as the monitoring is concerned, it is a chemical facility without increased health risk (or however we want to state it exactly). Maybe for each photo and date this could be the starting concept:

Air samples measured by ASPECT throughout this response found no elevated amounts of chemicals monitored.